

REVISED DRAFT: 1/17/97

UNITED STATES DISTRICT COURT
NORTHERN DISTRICT OF INDIANA
HAMMOND DIVISION



GARY DEVELOPMENT COMPANY,
INC.,
Plaintiff,

v.

UNITED STATES ENVIRONMENTAL
PROTECTION AGENCY,

Defendant

Case No. 2:96CV489 RL

AFFIDAVIT OF MICHAEL J. MIKULKA, P.E.

I, Michael J. Mikulka, hereby state:

1. I am currently a senior environmental engineer in the Enforcement and Compliance Assurance Branch of the Waste, Pesticides and Toxics Division of the United States Environmental Protection Agency (U.S. EPA), Region 5.
2. As a senior environmental engineer in the Enforcement and Compliance Assurance Branch of the Waste, Pesticides and Toxics Division, I am responsible for technical analysis and remedy selection for corrective action and enforcement cases under the Resource Conservation and Recovery Act (RCRA) hazardous waste program. As part of these job responsibilities, I conduct compliance inspections at hazardous waste facilities.
3. I am also responsible for integrating the RCRA corrective action and enforcement effort with enforcement for other media in specific geographic areas, and providing advice and training on enforcement policy and guidance to regional staff.
4. From 1990-1995, I was manager for Region 5's compliance and enforcement in the

National Pollutant Discharge Elimination System program established under section 402 of the Clean Water Act (CWA). I was also responsible for compliance and enforcement for municipal and industrial pretreatment under section 307 of the CWA, and sludge disposal requirements under section 405 of the CWA.

5. Prior to 1990, I held various progressively responsible positions within U.S. EPA relating to various CWA programs.

6. I received my Bachelor of Science degree in Engineering (Civil) in 1976 from the University of Connecticut. I am a registered professional engineer in Illinois and am affiliated with the American Society of Civil Engineers, a professional society.

7. On September 26, 1996, I conducted a RCRA Compliance Schedule Inspection at the Gary Development Company, Inc. (GDC) landfill located at 479 N. Cline Ave., Gary, Indiana (the Property). The Property is located just east of Cline Avenue in the City of Gary. Cline Avenue sits along the boundary between the Cities of Gary and East Chicago, Indiana. The southern boundary of the Property is adjacent to the Grand Calumet River (GCR or River). An access road to the Property and the landfill runs from the southwest corner of the Property, then due east along the toe of the landfill between the GDC landfill and the River, and then rises up to the top of the landfill about 300 feet from the SE corner of the property. See Air photo dated 9-25-90.

8. The purpose of the September 26, 1996 inspection was to determine whether GDC had taken any of the actions required by Administrative Law Judge Greene's April 8, 1996 Order and the Environmental Appeals Board's June 21, 1996 Order.

9. I conducted the inspection from approximately 10:00 a.m. until 1:00 p.m. It was raining steadily throughout the inspection.

10. Various representatives from the Indiana Department of Environmental Management (IDEM), including Bob Blaesing, a RCRA inspector from IDEM's Gary office, and a representative from the Indiana Department of Natural Resources, joined me on the inspection.

11. The inspection began at the GDC offices, located in the southwest corner of the Property. A discussion about the facility was held in the GDC offices with Larry Hagen, Jr., GDC's on-site representative. The field portion of the inspection was then started. Bob Blaesing of IDEM accompanied me on the field portion of the inspection, and took photographs. See photographs #1-11, labeled "9-26-96 Bob Blaesing, IDEM Gary Development Company." Other IDEM representatives and the IDNR representative acted independently during the inspection. We began the inspection by walking to the top of the landfill from GDC's offices. At the top of the landfill, we proceeded from west to east along the southern face of the landfill located along the Grand Calumet River.

12. I observed that no "Danger" signs were posted along the landfill's perimeter.

13. I observed that the landfill is capped with a clay layer, which appears to be about 2 feet thick. There is no soil cover on the cap to prevent erosion or to maintain integrity of the cap.

14. In addition, I observed that much of the landfill is devoid of any vegetation, and the rest is covered with weeds. Proper vegetation is necessary to prevent erosion of the cap, and maintain its integrity. See photo #1, 9-26-96 inspection.

15. I observed that a severe erosion problem exists on the Property. Sheet runoff (thin film surface flow) has created rills (gullies) in the landfill cap, which range from an estimated 4-6 inches to over 24 inches deep. The runoff picks up the clay from the landfill cap as the runoff moves off the cap and embankments, further eroding the landfill. See photos #1-#3, and photos

#5-#9, 9-26-96 inspection.

16. I observed from the top of the landfill that the Grand Calumet River adjacent to the southern boundary of the Property was being discolored a brownish color due to clay laden runoff from the Property. See photos #2-#3, and #5, 9-26-96 inspection. A ponded wetland area (located in the SE part of the Property) adjacent to the landfill access road as it inclines up onto the landfill and adjacent to river appeared to be acting as a filter for some of the runoff, in that some of the clay material appeared to be filtered out in the wetland. See photos #8-#11, 9-26-96 inspection. Runoff into the river and adjacent wetlands either occurs as sheet flow or through the rills that have formed. See photos #3, #5, 9-26-96 inspection, for example of rill erosion I observed that this occurs along the whole southern boundary of the property. Photos #1-#11, 9-26-96 inspection were all taken along southern boundary of Property.

17. When walking west off the landfill towards the offices, I observed small berms on both sides along portions of the landfill access road. See photo #7, 9-26-96 inspection, for view of berm. These berms had been breached by runoff from the landfill and the landfill access road, such that runoff could flow freely into the Grand Calumet River, either as sheet flow or through gullies that had formed.

18. Upon departure from the facility, I drove to the bridge going over the Grand Calumet River about 500 feet to the west of the Property. The brown plume created in the river by the runoff from the GDC landfill was being pushed further into the center of the channel due to runoff from the Property access road and the bridge.

19. On November 19, 1996, I conducted a follow-up litigation support inspection at GDC's landfill. I was on the Property from approximately 1:00 p.m. to 4:00 p.m.

20. A number of U.S. EPA and IDEM representatives were present at the inspection.

Attorneys for GDC and Larry Hagan, Jr., the site operator, were also present on the Property during the inspection.

21. I walked the entire perimeter of the Property, and took photographs as I went. A copy of the photographs are labeled #1-#24A, "11-19-96 M. Mikulka Gary Development Landfill."

22. I observed that the entire site is heavily eroded. See photos #4, #5, #12, #13, #14, #18, #21, #23, #24, 11-19-96 inspection.

23. I observed that the entire site lacks a proper cover over the clay cap, and is essentially devoid of vegetation. See photos #3, #4, #5, #6, #13, #16, #18, #21, #24, #24A, 11-19-96 inspection.

24. I observed that the site has a number of significant gullies in the cap where waste materials have been exposed. See photos #13, #21, 11-19-96 inspection.

25. I observed leachate from the north face of the landfill running into a pond located on the northern edge of the Property. See 9-25-90 air photo for location of pond on the Property; see also photos #17-#20 for actual views of the leachate/storm water collection pond located on the Property. The leachate I observed had a brownish/blackish color and a foul odor.

26. In my opinion, contaminants from the landfill that have flowed into the pond are likely to seep into the groundwater because the landfill does not have a liner or a leachate collection system; and thus, nothing would prevent contaminants from the pond from seeping into the groundwater.

27. As part of my responsibilities, I am familiar with groundwater conditions at the Dupont Company (DuPont) facility, which is located just west of Cline Avenue in East Chicago, Indiana.

SEE PHOTOS #1 & 2
BY KIRK MARAVOLLO,
IDEM, 11/19/96

(PHOTOS #1-2,
C. MARAVOLLO,
11/19/96)

DuPont assessed groundwater conditions at its site in 1990. In that assessment, groundwater from the Dupont property generally was found to flow south towards the Grand Calumet River, except near the Riley Park neighborhood where a deep sanitary sewer artificially causes the flow to move north. The condition created by the sanitary sewer does not exist in the vicinity of GDC; and therefore, my conclusion is that the general direction of groundwater flow near GDC is from north to south.

28. RCRA requires that landfills be capped, covered and vegetated, in order to minimize erosion and maintenance, and also to minimize the migration of surface waters (runon and runoff) from seeping into the landfill and creating leachate which migrates off-site. If the GDC landfill were properly closed in accordance with RCRA, the erosion and runoff problem at the landfill would be eliminated. Currently, the runoff from the GDC landfill creates the risk that contaminants are flowing from the landfill into the Grand Calumet River and wetlands on the Property adjacent to the river.

The foregoing statements are true and correct to the best of my knowledge.

Date: _____

Michael J. Mikulka

Sworn to and subscribed before me, the undersigned notary, this ____ day of _____, 1997.

Notary Public

My Commission Expires: